Contents of Applied Physics B54

This listing presents the papers in alphabetical order of the first author. The Author Index that follows covers **Applied Physics A** and **B**, and is presented in tabular form. The names are listed in alphabetical order in the first column. The second and third columns contain the bibliographic data necessary to locate the paper. The issue is specified by the number separated from the volume number by a slash. The PACS numbers given in the fourth column may be used in conjunction with the PACS listing on the left to infer the topic of a paper.

Photophysics and Laser Chemistry

Asaumi K.:
Second-harmonic power of $KTiOPO_4$ with double refraction.
Appl. Phys. B 54/4, 265-270 (1992) PACS: 42.65

Audretsch J., Lämmerzahl C.:
New inertial and gravitational effects made measureable by atom beam interferometry.
Appl. Phys. B 54/5, 351-354 (1992) PACS: 07.60L 03.65 04.80

Axner O., Ljungberg P., Malmsten Y.:
Lifetime mesurements of metastable states of Au, Bi, Cd, Mg, Pb, and Sr in an acetylene/air flame by laser-enhanced ionization spectrometry.
Appl. Phys. B 54/2, 144-155 (1992) PACS: 34.90 82.40

Babin F., Gagné J.-M.:
Hollow cathode discharge (HCD) dark space diagnostics with laser photoionization and galvanic detection.
Appl. Phys. B 54/1, 35-45 (1992) PACS: 52.80H 52.70 32.80

Bauer S., Bauer-Gogonea S., Ploss B.:
The physics of pyroelectric infrared devices.
Appl. Phys. B 54/6, 544-551 (1992) PACS: 07.62 85.50

Bava E., Shahian A.G.:
Interaction between atom and radiation with sinusoidally shaped amplitude: Applications to frequency standards.
Appl. Phys. B 54/6, 500-505 (1992) PACS: 32.80

Bennett W.R., Chebotayev V.P.:
Laser stabilitron.
Appl. Phys. B 54/6, 552-555 (1992) PACS: 42.55B 06.20

Bettermann H., Chini G.:
Picosecond fluorescence studies by intracavity gain spectroscopy in a modelocked dye laser.
Appl. Phys. B 54/3, 216-220 (1992) PACS: 31.50 32.50 31.70

Bötticher W., Lück H., Niesner St., Schwabedissen A.:
Small volume coaxial discharge as precision testbed for 0D-models of XeCl lasers.
Appl. Phys. B 54/4, 295-302 (1992) PACS: 42.55G 52.65 52.80

Buritskii K.S., Dianov E.M., Maslov V.A., Chernykh V.A., Shcherbakov E.A.:
Nonlinear directional coupler based on Rb:KTP-waveguides.
Appl. Phys. B 54/2, 167-169 (1992) PACS: 42.80

Cartaleva St.St., Gateva S.V.:
Output power enhancement of the 632.8 nm monomode He-Ne/I_2-laser.
Appl. Phys. B 54/4, 307-308 (1992) PACS: 42.55 42.60

Chebotayev V.P., Klementyev V.M., Pyltsin O.I., Zakhariash V.F.:
Optical pulse frequency stabilization of self-mode-locked HeNe lasers.
Appl. Phys. B 54/1, 98-99 (1992) PACS: 42.55B 06.20

Clauser J.F., Reinsch M.:
New theoretical and experimental results in Fresnel optics with applications to matter-wave and X-ray interferometry.
Appl. Phys. B 54/5, 380-395 (1992) PACS: 07.60L 42.10 42.80

Dai L.-K., Gou Y.-S., Gu C., Yeh P.:
Instabilities in coupled photorefractive ring cavities and self-pumped phase conjucations: I. Mean-field model and linear stability analysis.
Appl. Phys. B 54/1, 57-70 (1992) PACS: 42.65

Dai L.-K., Gou Y.-S., Gu C., Yeh P.:
Instabilities in coupled photorefractive ring cavities and self-pumped phase conjucators: II. Numerical results.
Appl. Phys. B 54/2, 156-166 (1992) PACS: 42.65

Datsyuk V.V.:
Some characteristics of resonant electromagnetic modes in a dielectric sphere.
Appl. Phys. B 54/2, 184-187 (1992) PACS: 42.65 42.10

Davis C.R., Egitto F.D., Buchwalter S.L.:
Dopant-induced excimer laser ablation of poly(tetrafluoroethylene).
Appl. Phys. B 54/3, 227-230 (1992) PACS: 78.65H 81.60

Dennis M.L., Diels J.-C., Mohebi M.:
Study of a carbon dioxide ring laser gyroscope.
Appl. Phys. B 54/4, 278-287 (1992) PACS: 42.55D 42.60 42.80

Desaintfuscien M., Schubert M., Siemers I., Blatt R.:
Joint comment on the paper "Kinetic energy and spatial width of ion clouds in Paul traps".
Appl. Phys. B 54/3, 246 (1992) PACS: 32.70

Dianov E.M., Luchnikov A.V., Pilipetskii A.N., Prokhorov A.M.:
Long-range interaction of picosecond solitons through excitation of acoustic waves in optical fibers.
Appl. Phys. B 54/2, 175-180 (1992) PACS: 42.65

Efthimiopoulos T., Koudoumas E.:
Intensity and resonance effects on the three-photon resonant third-harmonic generation in Hg.
Appl. Phys. B 54/3, 193-198 (1992) PACS: 42.65

Ekstrom Ch.R., Keith D.W., Pritchard D.E.:
Atom optics using microfabricated structures.
Appl. Phys. B 54/5, 369-374 (1992) PACS: 35.10 42.25

Englert B.-G., Walther H., Scully M.O.:
Quantum optical Ramsey fringes and complementarity.
Appl. Phys. B 54/5, 366-368 (1992) PACS: 42.50 03.65 42.52

Floch A. Le:
Comment on: Four-wave mixing in CO via the $C^1\Sigma^+(v'=0)$ state.
Appl. Phys. B 54/4, 317-318 (1992) PACS: 42.65 33.20

Franceschini M.A., Pini R., Salimbeni R., Vannini M.:
Auto-prepulse operation of a long-pulse XeCl laser.
Appl. Phys. B 54/4, 259-264 (1992) PACS: 42.55G 42.60

Frolov M.P., Ishkov D.V., Kryukov P.G., Pazyuk V.S., Yuryshev N.N.:
A frequency-doubled pulsed chemical oxygen-iodine laser.
Appl. Phys. B 54/5, 490-491 (1992) PACS: 42.55K 42.60 42.65

Gong Q., Xia Z., Zou Y.H., Li Y., Wu P., Zhu D.:
Third-order nonlinear optical properties of some organic nitroxyls.
Appl. Phys. B 54/2, 181-183 (1992) PACS: 42.70F 42.65

Gozzini S., Mariotti E., Gabbanini C., Lucchesini A., Marinelli C., Moi L.:
Atom cooling by white light.
Appl. Phys. B 54/5, 428-433 (1992) PACS: 32.80P 42.50

Haroche S., Brune M., Raimond J.M.:
Manipulation of optical fields by atomic interferometry: Quantum variations on a theme by Young.
Appl. Phys. B 54/5, 355-365 (1992) PACS: 42.50D 03.65

Hillrichs G., Dressel M.Hack H., Kunstmann R., Neu W.:
Transmission of XeCl excimer laser pulses through optical fibers: Dependence on fiber and laser parameters.
Appl. Phys. B 54/3, 208-215 (1992) PACS: 78.90 78.40 78.20

Hooker S.M., Haxell A.M., Webb C.E.:
Observation of new laser transitions and saturation effects in optically pumped NO.
Appl. Phys. B 54/2, 119-125 (1992) PACS: 42.55H

Jain B., Gupta P.K.:
Theoretical study of the feasibility of dual-band multiline operation of a TEA CO_2 laser with intracavity Fabry-Perot etalons.
Appl. Phys. B 54/6, 534-537 (1992) PACS: 42.60B 42.55

Kasevich M., Chu S.:
Measurement of the gravitational acceleration of an atom with a light-pulse atom interferometer.
Appl. Phys. B 54/5, 321-332 (1992) PACS: 32.80P 07.60 35.80 42.50

Ketterle W., Schäfer M., Arnold A., Wolfrum J.:
2D single-shot imaging of OH radicals using tunable excimer lasers.
Appl. Phys. B 54/2, 109-112 (1992) PACS: 82.50

Ketterle W., Pritchard D.E.:
Trapping and focusing ground state atoms with static fields.
Appl. Phys. B 54/5, 403-406 (1992) PACS: 32.80P

Klingenberg H.H., Gekat F.:
XeCl laser excitation by high power microwave pulses.
Appl. Phys. B 54/3, 205-207 (1992) PACS: 42.55H 42.60 52.80

Kölsch H.J., Rairoux P., Wolf J.P., Wöste L.:
Comparative study of nitric oxide immission in the cities of Lyon, Geneva, and Stuttgart using a mobile differential absorption LIDAR system.
Appl. Phys. B 54/1, 89-94 (1992) PACS: 06.70D 07.60 33.20

Kopiczynski T.L., Bogdan M., Kälin A.W., Schötzau H.J., Kneubühl F.K.:
Multiple breakdown in helium generated by hybrid 10 μm CO_2 laser pulses.
Appl. Phys. B 54/6, 526-530 (1992) PACS: 52.00 42.60

Lindberg M.:
Deflection of resonant multilevel particles in a standing wave light field.
Appl. Phys. B 54/5, 467-476 (1992) PACS: 32.80 33.80 42.50

Liou H.T., Yang H., Dan P.:
Laser induced lasing in the CS_2 vapor.
Appl. Phys. B 54/3, 221-226 (1992) PACS: 42.50 42.55
Lisboa J.A., Francke R.E.:
Observation of rotational energy transfer in iodine by two-photon time delayed spectroscopy.
Appl. Phys. B 54/6, 562-566 (1992) PACS: 34.50E
Liu S.R., Indebetouw G.:
Dynamics of a phase conjugate resonator: Transient build-up and decay rates.
Appl. Phys. B 54/4, 247-258 (1992) PACS: 42.65 42.80
Liu Y., Hering P., Scully M.O.:
An integrated optical sensor for measuring glucose concentra- tion.
Appl. Phys. B 54/1, 18-23 (1992) PACS: 42.80F 42.81 07.60
Longo S., Capitelli M., Gorse C., Dem'yanov A.V., Kochetov I.V., Napartovich A.P.:
Non-equilibrium vibrational attachment and dissociation kinetics of HCl in XeCl selfsustained laser discharges.
Appl. Phys. B 54/3, 239-245 (1992) PACS: 42.55G 52.80
LU Mao-hong, LIU Yu-mei:
Axially phase-matched parametric four- and six-wave mixing in potassium vapor.
Appl. Phys. B 54/4, 288-294 (1992) PACS: 42.60 42.65
Mann B.A., O'Leary S.V., Astill A.G., Greenhalgh D.A.:
Degenerate four-wave mixing in nitrogen dioxide: Application to combustion diagnostics.
Appl. Phys. B 54/4, 271-277 (1992) PACS: 82.40P 33.20 07.65
Marte M., Stenholm S.:
Multiphoton resonances in atomic Bragg scattering.
Appl. Phys. B 54/5, 443-450 (1992) PACS: 42.50D 42.50
Marte M.A.M., Zoller P.:
Quantum nondemolition measurement of transverse atomic position in Kapitza-Dirac atomic beam scattering.
Appl. Phys. B 54/5, 477-485 (1992) PACS: 03.65B 42.50
Mauri F., Arimondo E.:
Two dimension selective coherent population trapping controlled by a phase shift.
Appl. Phys. B 54/5, 420-427 (1992) PACS: 32.80 42.50
Metzner J., Langhoff H.:
A high power N_2 laser using water filled strip lines.
Appl. Phys. B 54/1, 100-101 (1992) PACS: 42.60B
Miniatura Ch., Robert J., Boiteux S. Le,Reinhardt J., Baudon J.:
A longitudinal Stern-Gerlach atomic interferometer.
Appl. Phys. B 54/5, 347-350 (1992) PACS: 32.60 07.60
Mio N., Tsubono K.:
Short- and long-term frequency stabilization of a He-Ne laser using a Fabry-Perot cavity locked to the Lamb dip.
Appl. Phys. B 54/3, 202-204 (1992) PACS: 07.60 42.60
Momma C., Hube M., Tünnermann A., Mossavi K., Wellegehausen B.:
Infrared recombination laser pumped by low energy Nd:YAG and excimer lasers.
Appl. Phys. B 54/3, 234-238 (1992) PACS: 42.55 42.60 52.50
Moraes J.C.S., Scalabrin A., Pereira D., Carelli G., Ioli N., Moretti A., Strumia F.:
IR and FIR spectroscopy of $^{13}CD_3OH$ around the 10P(22) and 10P(24) CO_2 laser lines: New FIR laser emissions, frequency measurements and assignments.
Appl. Phys. B 54/1, 24-28 (1992) PACS: 42.55
Morinaga A., Ito N., Sakurai T.:
Velocity-selective optical Ramsey fringes by optical pumping. in a Ca atomic beam.
Appl. Phys. B 54/1, 29-34 (1992) PACS: 07.65E 32.80 42.65
Moskovets E.V.:
Mass-reflectron as an ion energy analyzer.
Appl. Phys. B 54/6, 556-561 (1992) PACS: 82.80M
Müller M., Stamm U.:
Numerical analysis of pulse formation in solid-state lasers mode-locked with a linear external cavity.
Appl. Phys. B 54/2, 136-143 (1992) PACS: 42.55R 42.60 42.65
Odoulov S., Olfen U. van, Krätzig E.:
Mirrorless parametric oscillation in $BaTiO_3$.
Appl. Phys. B 54/4, 313-316 (1992) PACS: 42.25B 42.70 78.20
Okuda I., Shaw M.J.:
Gain depletion due to amplified spontaneous emission in multi-pass laser amplifiers.
Appl. Phys. B 54/6, 506-512 (1992) PACS: 42.60 42.55
Opat G.I., Wark S.J., Cimmino A.:
Electric and magnetic mirrors and gratings for slowly moving neutral atoms and molecules.
Appl. Phys. B 54/5, 396-402 (1992) PACS: 35.10D 35.86 42.00 79.00
Paskov P.P., Pavlov L.I.:
Calculation of carrier-induced refractive index change in InSb.
Appl. Phys. B 54/2, 113-118 (1992) PACS: 78.20 42.65
Pfistner C., Albers P., Weber H.P.:
Influence of spatial mode matching in end-pumped solid state lasers.
Appl. Phys. B 54/1, 83-88 (1992) PACS: 42.60F 42.60
Plass W., Rottke H., Heuer W., Eichhorn G., Zacharias H.:
Surface sum-frequency mixing for auto- and cross-correlation of ultrashort UV and IR pulses.
Appl. Phys. B 54/3, 199-201 (1992) PACS: 07.60 78.65
Porter F.M., Williams D.R.:
Quantitative CARS spectroscopy of the ν_1 band of water vapour.
Appl. Phys. B 54/2, 103-108 (1992) PACS: 42.65
Racz B., Patocs A., Szabo G., Bor Zs., Ignacz F.:
Direct generation of sub-nanosecond pulses by a high-pressure miniature excimer laser.
Appl. Phys. B 54/6, 513-515 (1992) PACS: 42.55G 42.60
Riehle F., Witte A., Kisters Th., Helmcke J.:
Interferometry with Ca atoms.
Appl. Phys. B 54/5, 333-340 (1992) PACS: 32.80 42.50 42.65
Sato S., Higurashi E., Taguchi Y., Inaba H.:
Achievement of laser fusion of biological cells using UV pulsed dye laser beams.
Appl. Phys. B 54/6, 531-533 (1992) PACS: 87.00 42.60 42.80
Schumacher E., Wilkens M., Meystre P., Glasgow S.:
Spontaneous emission in the near-resonant Kapitza-Dirac effect.
Appl. Phys. B 54/5, 451-466 (1992) PACS: 32.88 42.50
Sekkat Z., Dumont M.:
Photoassisted poling of azo dye doped polymeric films at room temperature.
Appl. Phys. B 54/5, 486-489 (1992) PACS: 82.40 78.65 42.79
Sharma A., Draxler S., Lippitsch M.E.:
Time-resolved spectroscopy of the fluorescence quenching of a donor-acceptor pair by halothane.
Appl. Phys. B 54/4, 309-312 (1992) PACS: 33.00 34.00 82.50
Siemsen K.J., Madej A.A., Hanes G.R., Reid J.:
Improved frequency stability of the ammonia laser.
Appl. Phys. B 54/2, 126-131 (1992) PACS: 42.55C
Sieverdes F., Pinnow M., Marowsky G.:
Second-harmonic generation from embedded polarization sheets.
Appl. Phys. B 54/1, 95-97 (1992) PACS: 42.65
Slaby J., Träger F.:
Sensitivity enhancement in thermal-lens laser spectrometry.
Appl. Phys. B 54/6, 538-543 (1992) PACS: 07.65 78.20 66.60
Sleator T., Pfau T., Balykin V., Mlynek J.:
Imaging and focusing of an atomic beam with a large period standing light wave.
Appl. Phys. B 54/5, 375-379 (1992) PACS: 32.80 42.50 07.77
Stankov K.A., Tzolov V.P., Mirkov M.G.:
Compensation of group-velocity mismatch in the frequency-doubling modelocker.
Appl. Phys. B 54/4, 303-306 (1992) PACS: 42.65 42.60
Sterr U., Sengstock K., Müller J.H., Bettermann D., Ertmer W.:
The magnesium Ramsey interferometer: Applications and prospects.
Appl. Phys. B 54/5, 341-346 (1992) PACS: 32.80 42.50 07.60
Sun X., Nasu K., Wu C.Q.:
Frequency dependence of third-harmonic generation in polyacetylene.
Appl. Phys. B 54/2, 170-174 (1992) PACS: 78.90 42.65 78.20
Tan S.M., Walls D.F.:
Numerical simulation of atomic diffraction in the Raman-Nath regime.
Appl. Phys. B 54/5, 434-442 (1992) PACS: 32.80 42.50
Teubner U., Kühnle G., Schäfer F.P.:
Detailed study of the effect of a short prepulse on soft X-ray spectra generated by a high-intensity KrF laser pulse.
Appl. Phys. B 54/6, 493-499 (1992) PACS: 52.50J 52.40 52.25
Toth Z., Kargl P., Grivas C., Piglmayer K., Szörényi T., Bäuerle D.:
LCVD of tungsten microstructures on quartz.
Appl. Phys. B 54/3, 189-192 (1992) PACS: 42.60 81.15 82.00
Wallis H., Dalibard J., Cohen-Tannoudji C.:
Trapping atoms in a gravitational cavity.
Appl. Phys. B 54/5, 407-419 (1992) PACS: 32.80P
Wang L., Jones W.E.:
A polarized CARS investigation of the fine structure population inversion of Cl atoms from laser photolysis of ICl and the quenching of $Cl(^2P_{1/2})$ by O_2.
Appl. Phys. B 54/1, 52-56 (1992) PACS: 42.65C 82.20 82.40
Wang L., Ledingham K.W.D., McLean C.J., Singhal R.P.:
Laser-induced collisional processes in resonant laser ablation of GaAs.
Appl. Phys. B 54/1, 71-75 (1992) PACS: 32.80 32.90 79.20 34.90

Wei T.H., Hagan D.J., Sence M.J., Stryland E.W. van, Perry J.W., Coulter D.R.:
Direct measurements of nonlinear absorption and refraction in solutions of phthalocyanines.
Appl. Phys. B 54/1, 46-51 (1992) PACS: 33.00 42.65 42.80

Weigand R., Guerra J.M., Davila J.:
Photophysical characterization of pyrazino [2,3-c]-1,2,6- thiadiazine 2,2-dioxides in DMSO and acetonitrile solutions.
Appl. Phys. B 54/6, 516-525 (1992) PACS: 82.50

Winkler R., Wuttke M.W.:
A detailed study of electron kinetics involved in modelling discharge pumped excimer laser plasmas.
Appl. Phys. B 54/1, 1-17 (1992) PACS: 51.10 51.50 52.25

Woisetschläger J., Jäger H., Neger T., Widmann K.:
Investigation of the population inversion in a He-Ne laser discharge by heterodyne holographic interferometry.
Appl. Phys. B 54/2, 132-135 (1992) PACS: 42.40 42.55

Yankov P., Petrov G.:
High energy negative feedback controlled passively mode-locked Nd: YAG laser.
Appl. Phys. B 54/3, 231-233 (1992) PACS: 42.60

Zweig A.D., Deutsch T.F.:
Shock waves generated by confined XeCl excimer laser ablation of polyimide.
Appl. Phys. B 54/1, 76-82 (1992) PACS: 81.60J 43.35 87.00